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Claim Amendments

1-17. (canceled)

- 18. (new) A remedy for the reduction or suppression of the sensation of pain in higher animals, especially human beings, containing with the exclusion of cells or cell lysates- expression constructs containing the POMC-sequence deleted of the coding regions for adrenocorticotropic hormone (ACTH) and beta-melanocyte stimulating hormone (β -MSH), which encode at least once for β -endorphin.
- 19. (new) The remedy according to claim 18, wherein one single expression construct encodes for one, two or three β -Endorphin.
- 20. (new) The remedy according to claim 18, which contains additionally an expression construct coding for corticotropin-releasing-factor (CRF).
- 21. (new) The remedy according to claim 19, which contains additionally an expression construct coding for corticotropin-releasing-factor (CRF).
- 22. (new) The remedy according to claim 18, where the βexpression construct is a plasmid or a linear, covalently closed expression construct.

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- 23. (new) The remedy according to claim 22, which is applicable by injection.
- 24. (new) The remedy according to claim 22, where the DNA is complexed by polyethylenimine (PEI).
- 25. (new) The remedy according to claim 22, where the linear, covalently closed expression construct is modified with a peptide.
- 26. (new) The remedy according to claim 25, where the linear, covalently closed expression construct is modified with a peptide comprising the nuclear localization sequence (NLS) of the large T-antigen of SV40.
- 27. (new) The remedy according to claim 26, where the NLS peptide contains the amino acid sequence PKKKRKVEDPYC.
- 28. (new) The remedy according to claim 22, where the linear, covalently closed expression construct is conjugated to a cationic peptide of between 8 and 20 amino acids in length.
- 29. (new) A vector for the production of an expression construct as a component of a remedy, containing one of (A) and (B):
- (A) the POMC-sequence deleted of the coding regions for adrenocorticotropic hormone (ACTH) and beta-melanocyte stimulating hormone (β -MSH), which encodes one of:

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once for β -endorphin;

at least twice for β -endorphin;

three times for \(\beta \)-endorphin; and

- (B) the desoxynucleic acid sequence of corticotropin releasing factor (CRF) (pMOK-CRF: Seq. ID 6).
- 30. (new) The desoxyribonucleic acid sequence, containing one of (C), (D), and (E):
- (C) one of the sequence tracts encoding β -endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 1 (rPOMC 1x β -END);
- (D) two of the sequence tracts encoding β -endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 7 (rPOMC $2x\beta$ -END); and
- (E) three of the sequence tracts encoding β -endorphin from the pro-opiomelanocotrin gene (POMC), specifically the sequence shown in Seq. ID 2 (rPOMC $3x\beta$ -END).